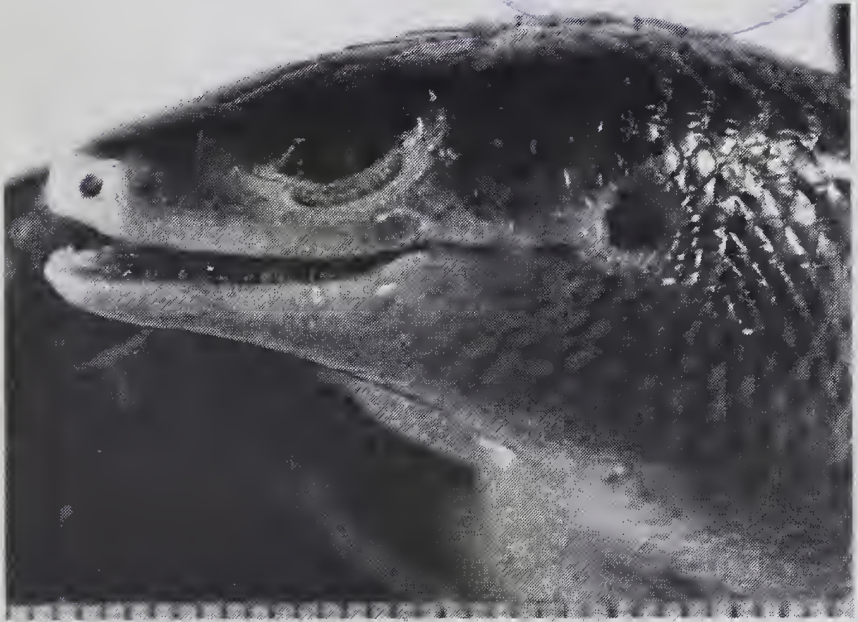
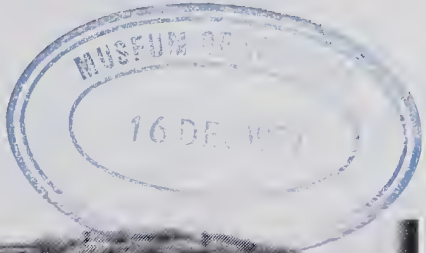

NORTHERN TERRITORY NATURALIST



THE NORTHERN TERRITORY FIELD NATURALISTS' CLUB FOUNDED 1977

Officers for 1986/87

President: Kath Shurcliff Secretary: Iris Beale
Treasurer: Brian Whitehead Librarian: Sonia Tideman
Editor of the N.T. Naturalist: Niven McCrie

P.O. BOX 39565 WINNELLIE. N.T. 5789

The objects of this club are to promote the study of and interest in the flora and fauna of the Northern Territory and in its conservation. The club provides opportunities for discussion and dissemination of information among its members by regular meetings, publications and fieldwork. It works in close contact with scientific institutions wherever possible, and encourages the publication of scientific and informed popular literature in the various fields of natural history.

N.T.F.N.C. Subscription Rates: \$12.00, Family membership \$15.00

All members receive the regular newsletter Nature Territory and the N.T. NATURALIST. The Club holds monthly meetings and field excursions. Meetings are held in the N.T. Museum of Arts and Sciences theatre, Conacher Street, Fannie Bay, at 8 p.m. on the second Wednesday of each month.

Advice to Contributors

Contributors to the N.T. Naturalist need not be members of the N.T.F.N.C., although all members are urged to contribute. Contributions may take one of the following forms:

Notes

If you have made a series of observations (for example, on the behaviour of a bird or other animal) or have notes on something new or unusual in the field, then this is the place to report your findings. Contributions should be in the order of 200-500 words and provided with a title.

Articles

An article should run to a maximum of about 1500 words (four to five double-spaced typed, A4 pages) and deal with a topic in the sciences. It should be written in a manner intelligible to readers without a specialist knowledge of the subject. Articles should be appropriately illustrated by clear, black ink graphs, diagrams or photographs.

Cover: *Skink* *Mabuya multifasciata* Photo: *Glen Ingram*

Typeset by Sandpiper Productions, Box 39373 Winnellie N.T.



**MAMMALS OF LAKE NASH AND GEORGINA DOWNS
STATIONS AND A FIRST RECORD
OF THE NARROW-NOSED PLANIGALE,
PLANIGALE TENUIROSTRIS,
FROM THE NORTHERN TERRITORY**

W.A. Low and B.W. Strong
W.A. Low Ecological Services,
P.O. Box 3130, Alice Springs, N.T. 5750

The distribution of small mammal species in the Northern Territory is poorly known. Parker (1973) details the distributions of known specimens in the Northern Territory up to 1971 and Strahan (1983) provides the latest summary of distributions in Australia.

In August 1984 a resource survey was made of the 8547 km² Lake Nash and 3472 km² Georgina Downs pastoral properties on the south edge of the Mitchell Grass (*Astrebla* spp.) plains of the Barkly Tableland adjacent to the Queensland border (21° 50', 137° 30'). The survey covered the major habitats which include Mitchell Grass/cracking clay plains, *Acacia* shrubland/lateritic hills and Coolibah (*Eucalyptus microtheca*) riparian clay channels. Surveys were made using Elliott and pit trapping, observation of animals and sign, analysis of Barn Owl *Tyto alba* pellets, and gathering museum and literature records.

The species of mammals known to occur currently on Lake Nash and Georgina Downs are shown in Table 1 which also indicates the source of the data.

An interesting, though not unexpected, first collection in the Northern Territory was that of *Planigale tenuirostris*, the Narrow-nosed Planigale. The species' distribution is associated with cracking clay soils in inland N.S.W., Qld and S.A. (Read 1983; Andrew & Settle 1982). Our specimen, comprising two dentaries, was collected from a Barn Owl pellet taken from a hollow Coolibah trunk on the Gordon Creek in the south west of Lake Nash at 21°42', 137° 17' in Tobermorey Land System (Christian *et al*, 1954). The surrounding cracking clay soils were moderately densely vegetated with *Aristida*, and *Sida* spp. and a variety of low forbs and grasses and *Acacia* spp. The creek channel and fringe was heavily vegetated with *Enteropogon* and *Themeda* under Coolibah. While it cannot be certain where the owl had captured the prey, it was probably within several kilometres of the roost tree. Other species collected in the owl pellets at the site were House Mouse *Mus musculus*, Fat-tailed Dunnart *Sminthopsis crassicaudata*, Stripe-faced Dunnart *S. macroura*, and Forrest's Mouse *Leggadina forresti*. The Fat-tailed Dunnart is near the northern limit of known distribution in Australia (Strahan 1983).

The status of the species observed is shown in Table 1. Our rapid reconnaissance survey permitted only a subjective assessment of abundance of species from observations of individuals, tracks and sign. The abundance of Red Kangaroos has increased in the last four or five years according to the Manager. This coincides with Dingo control efforts but also with increased rainfall.

The rumoured presence of the Northern Nailtail Wallaby *Onychogalea unguifera* in Camil and Camilrock Land System on Georgina Downs could not be confirmed. A possible feeding hole of a Greater Bilby *Macrotis lagotis*, in a patch of Yelka (*Cyperus* sp.) suggested that the species may persist at the south of Lake Nash in Warnard and Tobermorey Land Systems.

No feral pigs, camels, donkeys, horses or cattle occur on the station. This is due to lack of surface waters during the prolonged dry season (apart from bores and dams which can be closed off) which prevents establishment and facilitates control of feral mammals.

Acknowledgements

This survey was done while we were under contract to the Conservation Commission of the N.T. The analysis of the owl pellets was done by Jeff Cole and identification was made by Jeff and Dave Gibson; thanks to both. The cooperation of Percy Crumblin, Manager of Lake Nash and Georgina Downs Pastoral Stations, is greatly appreciated.

References

- ANDREW, D.L. and G.A. SETTLE. 1982. Observations on the behaviour of species of Planigale (Dasyuridae, Marsupialia) with particular reference to the Narrow-nosed Planigale *Planigale tenuirostris*. 311 - 324 in Archer, M. (Ed) *Carnivorous Marsupials*. Bcatty:Sydney
- CHRISTIAN, C.S. *et al.* 1954. Survey of the Barkly Region, 1947 - 48. *Land Research Series No. 3*. CSIRO: Melbourne.
- PARKER, S.A. 1973. An annotated checklist of the native land mammals of the Northern Territory. *Records of the South Australian Museum* 16 (1).
- READ, D.G. 1983. Narrow-nosed Planigale, *Planigale tenuirostris*. In Strahan, R. (Ed.) 1983. *The Australian Museum Complete Book of Australian Mammals*. Angus and Robertson: Sydney: 77 - 8
- STRAHAN R., (ed.) 1983. *The Australian Museum Complete Book of Australian Mammals*. Angus and Robertson: Sydney.

Table 1: Mammals known to occur on Lake Nash and Georgina Downs Station, N.T.

Scientific Name	Common Name	Record Type	Land System; Status
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	O: dung	Tobermorey; occasional
<i>Planigale tenuirostris</i>	Narrow-nosed Planigale	Owl pellet	Tobermorey;?
<i>Sminthopsis crassicaudata</i>	Fat-tailed Dunnart	Owl pellet	Tobermorey;?
<i>S. macroura</i>	Stripe-faced Dunnart	Owl pellet	Tobermorey;?
<i>Macropus rufus</i>	Red Kangaroo	O	Ag,At,Kl,G,Wd, T; mod. common
<i>Leggadina forresti</i>	Forrest's Mouse	Owl pellet,*	T;?
<i>Mus musculus</i>	House Mouse	C	Cl; common
<i>Notomys alexis</i>	Spinifex Hopping-Mouse	C	Cl; common;
<i>Rattus villosissimus</i>	Long-haired Rat	*	;plague in 1960's, none since 1979
<i>Canis familiaris dingo</i>	Dingo	O *	most;mod.common
<i>Felis catus</i>	Feral Cat	O	Cl,Ck; common
<i>Oryctolagus cuniculus</i>	European Rabbit	O	Ag,At,T,Wd,Ck; Sparse

Notes: Symbols used are:

Land Systems:

O - Observed

C - Collected

* - Held in Central

Australian Museum
Collection

Ag - Argadargada

At - Austral

B - Barkly

Ck - Camilrock

Cl - Camil

Kl - Kallala

T - Tobermorey

Wd - Wonardo

G - Georgina

THE HERMIT CRABS OF DARWIN

Gary J. Morgan
Western Australian Museum
Francis Street, Perth W.A. 6000

Introduction

The ocean and estuarine shores around Darwin incorporate a wide diversity of habitat types, including open sandy beaches, rocky platforms, sand and mud flats and mangrove forests. All of these habitats are home to a variety of crustaceans, including crabs, shrimps and the somewhat misnamed hermit crabs.

Hermit crabs are not true crabs, just as 'mantis shrimps' (stomatopods) are not true shrimps nor 'fish lice' (parasitic isopods) true lice. Hermit crabs resemble true crabs in the development of claws (chelae) on the first pair of legs (chelipeds) and in possessing stalked eyes. The tail (abdomen) of hermit crabs is not reduced in size as in true crabs however, and the antennae are longer than those of crabs. The second and third legs (pereiopods) are large and used for walking; the fourth and fifth pereiopods are small and grip the inner surface of the shell used as shelter. A stylised hermit crab is illustrated in Figure 1.

Classification of hermit crabs

There are two major ecological divisions of hermit crabs:

i) those that are aquatic (marine or estuarine) and breathe oxygen from the water via gills, and ii) those that are terrestrial with modified gill chambers acting as 'lungs' and breathing air. There are no truly freshwater hermit crabs.

There are two families of aquatic hermit crabs commonly collected intertidally and in shallow waters. These are the Diogenidae and Paguridae. In the former, the left cheliped is usually larger than the right or the chelipeds are approximately equal in size, while in the latter family the right cheliped is larger. A third family, the Parapaguridae, occurs in deep offshore waters but species are rarely seen except in deep water trawls.

The terrestrial hermit crabs comprise the family Coenobitidae. These hermits are usually associated with coastal areas but utilise seawater only to release fertilised eggs. Like most marine hermit crabs, the eggs hatch in seawater releasing planktonic larvae that metamorphose through several stages before settling onto the substrate and acquiring the first of their mobile homes.

It is of course the utilisation of gastropod shells as portable shelters that best characterises hermit crabs. Only the world's largest hermit crab, the coconut or robber crab *Birgus latro*, a coenobitid of tropical Indo-Pacific islands, does not utilise a mobile shelter as an adult,

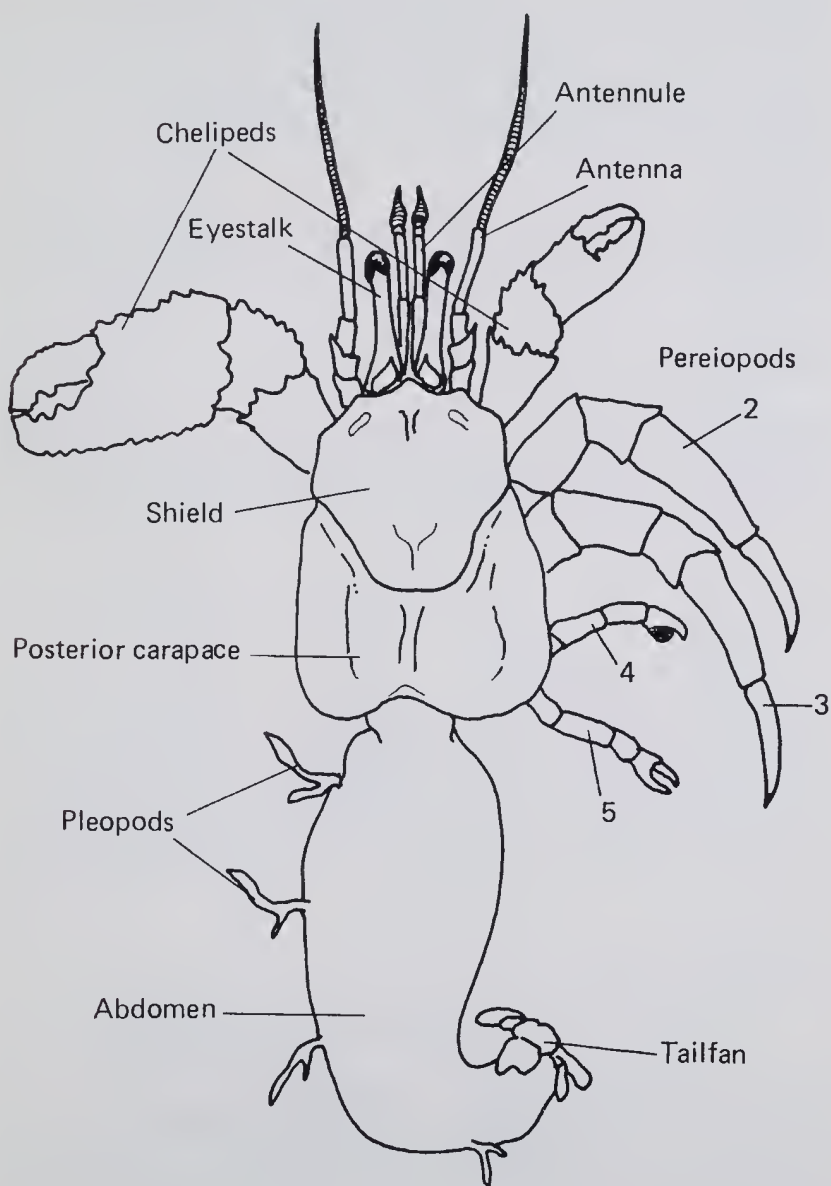


Fig. 1

though its small juveniles do so. This hermit has quite a calcareous abdomen which it folds underneath the thorax, quite unlike the coiled, soft abdomen of shell-living hermits. A few hermit crabs use alternatives to shells as shelters. Hollow soft rocks, such as pumice, and sponges are utilised as shelters by some hermits (e.g. species of *Cancellus*), and hermit crabs in aquaria have used artificial shells of transparent glass.

Hermit crabs of Darwin

The inshore seas and coastal regions of Darwin support very large populations of hermit crabs, both aquatic and terrestrial. While the terrestrial hermits are more obvious, the aquatic forms are more diverse and I will discuss these first.

Aquatic hermit crabs

The intertidal habitat is a difficult one for marine animals. Species must be adapted to exposure to the air and the consequent effects of drying (desiccation). Hermit crabs are admirably suited to this role. The gastropod shell acts as a water retention chamber and the crabs are quite mobile, moving to and from pools of water.

Seven species of aquatic hermit crabs are relatively common in the intertidal and shallow subtidal zones of Darwin. Other species occur in deeper waters offshore but are not considered here.

If the mud and sand flats of Darwin are closely examined, especially in or near drainage channels or seepages, huge numbers of small gastropod shells will be apparent. At first glance these may seem empty. Certainly most are devoid of their original occupant, the mollusc that secreted the shell. However many of these shells contain the diogenid hermit crab *Diogenes avarus*, a small species of rather innocuous appearance being a pale grey-brown in colour. The genus *Diogenes* can be recognised under magnification by the presence of a small movable rostrum between the eyestalks (Figure 2a). The left cheliped is much larger than the right and on the adult male of *D. avarus* is very elongate (Figure 2b).



Fig. 2

A second species of *Diogenes* also occurs on intertidal flats of Darwin, in lower numbers than *D. avarus*. This is *D. gardineri*, distinguishable by its much more hairy (setose) appearance and less elongate left chelipeds on males.

Far more outstanding in coloration are members of another diogenid genus, *Clibanarius*. These hermit crabs attain larger sizes than *Diogenes*, have left and right chelipeds similarly sized and are often characterised by distinct bands of colour on the chelipeds, legs and body. In the Darwin environs, there are three very similar species of banded *Clibanarius*. One, *C. longitarsus*, has its eyestalks fairly uniformly coloured (Figure 3a), the lower surface being slightly paler than the olive green upper surface, while the legs are banded in blue-green and brown or orange. This species often occurs in or near mangrove forests, inhabiting shells of *Terebralia palustris* and *Telescopium telescopium*. The other two species have roughly similar banding on the legs but the eyestalks also bear longitudinal brown lines. *Clibanarius taeniatus* has a distinctive pattern of four broad blue-green bands on the anterior part of the body (shield) (Figure 3b), lacking on the third species, *C. infraspinatus*. These two species usually occur in rock pools, inhabiting a variety of rock platform gastropod shells. A fourth, less common species of *Clibanarius*, *C. virescens* is mostly brown-green and lacks banding on the legs. The terminal segments of pereopods two and three are cream, sometimes with a dark green or brown patch in the middle (Figure 3c).

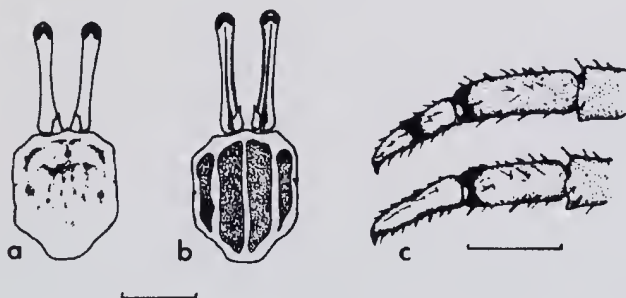


Fig. 3

Only one species of the family Paguridae has been recorded around Darwin. *Pagurus hedleyi* is a small hermit crab distinguished by its large right cheliped and brightly coloured eyestalks which are orange with a blue band around the centre.

Very little is known about the life histories or biology of Australia's aquatic hermit crabs. It is likely that most are scavengers, feeding on plant and animal debris. The high numbers of hermits in rock pools and on intertidal flats implies their consumption of primarily plant matter, including algae, and it is likely that they are important components of the feeding (trophic) chains of Darwin's intertidal communities. They are probably eaten by various fish and predatory crustaceans (e.g. swimming crabs) at high tide and by birds at low water.

Terrestrial hermit crabs

The most frequently encountered hermit crab of the Darwin area is the terrestrial coenobitid, *Coenobita spinosus* (Figure 4). Several species of *Coenobita* occur throughout the Indo-Pacific region but it appears that only *C. spinosus* is common in northern Australia.



Fig. 4

Some variation in coloration occurs across its range but Darwin specimens are generally pale brown with darker brown patches on legs, chelipeds and on the shield.

Many Darwin properties, especially those near the seashore, creeks and mangroves, are the tramping ground of these fascinating animals. The hermits breathe air via the vascularised walls of their gill chambers and will drown if maintained in water. Fresh water is drunk and used to moisten the chamber walls. These hermits are scavengers, consuming animal matter if available but primarily eating plant material including leaves of some native plants and vegetables. They have proven popular as pets, marketed under the undeserved label of 'crazy crabs'. The hermits can be kept in terraria with a small reserve of fresh water, feeding on vegetables such as lettuce and tomatoes. Sometimes a hermit will swap its present shell for a larger residence. All species of *Coenobita* are tropical and maintenance of warm conditions is desirable for their wellbeing. During the heat of the day, *C. spinosus* may clump in considerable numbers in cooler or moister areas.

Discussion

The Darwin area is similar to most tropical sites in that the hermit crab family Diogenidae is dominant over the Paguridae in terms of species diversity and numbers of individuals. In temperate seas, pagurids may be dominant over diogenids. The diversity of hermit species at Darwin is not high, but several species occur in remarkable numbers. It is a characteristic of many turbid or estuarine areas that while diversity of animals may be low, populations of successful species can be very high. Most of the Darwin hermit crabs have large distributions across the tropics of the Indian and Pacific Oceans, however *Pagurus hedleyi* may be restricted to northern Australia and the Arafura Sea.

DOES THE SKINK, *MABUYA MULTIFASCIATA*, OCCUR IN AUSTRALIA?

Glen Ingram
Queensland Museum, P.O. Box 300
South Brisbane, Q. 4101

In the collection of reptiles at the Australian Museum, Sydney, there is a significant specimen of *Mabuya multifasciata* (Fig. 1). The specimen, which is registered as R.9002, purportedly was collected in Darwin, Northern Territory.

This is significant because neither the species nor the genus of skinks have been recorded from Australia (Cogger, 1983).

The description of the specimen is as follows:

The distance from the tip of the snout to the vent is 115 mm; the width of the head is 20mm; the tail is incomplete. Supranasals are present and these nearly meet in the midline of the body. There are seven supralabials; the fifth is the largest and positioned below the eye. Above the eye, there are six supraciliaries. The parietals are separated. There are four, small, pointed lobules on the leading edge of the ear opening. The scales in the mid-dorsal area are tricarinated. Around the midbody there are 32 rows of scales; from the nuchals to a point above the vent there are 43 rows. On the longest toe of the hind foot there are 21 subdigital lamellae. The specimen is brown and faded and no pattern is obvious.

This description matches that given for *M. multifasciata* by Horton (1973). He said the species occurred in Thailand, Malaysia, the Philippines, and Indonesia (including West Irian). It has not been recorded in Papua New Guinea (Scott, Parker and Menzies, 1977).



Fig. 1

Does the existence of this specimen mean that *M. multifasciata* should be added to the list of Australian fauna? For the present I do not think the action is warranted. The specimen was purchased in 1926 from 'Frank Ardill'. Since that time there has been no other record. From my experience in Malaysia, *M. multifasciata* was a wary lizard, but it certainly could not have been described as 'cryptic'. One would have expected other records of such a big skink if it lived around Darwin. Most likely the specimen was accidentally introduced, probably in cargo from the islands to the north in Indonesia. There is also the possibility that the locality is incorrect. Unfortunately this is impossible to check. Other than the data in the register of the Australian Museum, no more information is available.

The record however, cannot be ignored. The locality is definite. In the case of *Lamprolepis smaragdina* the presence of that skink could be disregarded because the locality, 'Point Cook, Cooktown, Queensland', did not exist (Ingram and Parker, 1977). *M. multifasciata* looks similar to the Australian skink, *Egernia frerei* (see Cogger, 1983, for illustrations and description). There is a possibility *M. multifasciata* has been overlooked because of this resemblance. The two species can be readily separated by looking for supranasal scales: *M. multifasciata* has them, *E. frerei* does not.

I thank Drs. H. Cogger and A. Greer, Australian Museum, for access to the collection and information in their care.

References

- COGGER H.G. 1983. *Reptiles and amphibians of Australia*. 3rd ed. Reed: Sydney.
- HORTON, D. 1973. Evolution in the genus *Mabuya* (Lacertilia, Scincidae). Unpublished Ph.D. thesis. University of New England, Armidale.
- INGRAM, G.J. and F. PARKER 1977. The occurrence of *Lamprolepis smaragdina* (Lesson) in Australia? *Herpetofauna* 9(1): 2-3
- SCOTT, F., F. PARKER, and J.I. MENZIES, 1977. A checklist of the amphibians and reptiles of Papua New Guinea. *Wildlife in Papua New Guinea*. 77(3): 1-18.

FIRST RECORD OF THE BLUE-BILLED DUCK FOR THE
NORTHERN TERRITORY

Richard Noske and Fred van Gessel

R. Noske c/o Dept. of Biology, D.I.T., Casuarina 5792

Fred van Gessel 1/38 Prieseman Ave., Umina. N.S.W. 2257

While birdwatching at Sanderson Sewerage Works, Darwin, on 31 March, 1985, with Tony Hertog and Keith Fisher, we noticed a small diving duck in one of the ponds. On the basis of its size, shape and behaviour, we tentatively identified the bird as a Blue-billed Duck *Oxyura australis*. This identification was strengthened with the aid of a 20 x telescope. Although the bird was not in the typical adult breeding plumage with which we were familiar its general coloration corresponded with the eclipse plumage described in Frith (1968). The bird was subsequently sighted by John McKean and others, who concurred with our identification.

All observers noted the following general characteristics of the bird: low in the water, sloping bill; pin-like tail feathers which were occasionally spread and erected out of the water; dark brown body with brownish-black head and neck, and dark grey bill. According to Frith (1968: 295), Blue-billed Ducks begin their postnuptial moult in December, and 'most males have undergone it by March, though an occasional bird is still moulting in May'.

There are no known previous records of this species occurring in the Northern Territory (Storr 1977; J.L. McKean pers. comm.). The northern limit of its normal range is generally regarded as about 29° S., but Field Atlas records show a considerable number of sightings between 26° and 29° S (Blakers *et al.* 1984). The northernmost record was at Mount Isa in March 1978. Although this corresponds with the time of year at which our observation was made, Blakers *et al.* (1984) stated that there was no seasonal pattern at the edges of the species' range.

References

- BLAKERS, M., S.J.J.F. DAVIES and P.N. REILLY. 1984. *The Atlas of Australian Birds*. Melbourne University Press: Melbourne.
- FRITH, H.J. 1968. *Waterfowl in Australia*. Angus & Robertson: Sydney.
- STORR, G.M. 1977. *Birds of the Northern Territory*. Spec. Publ. West. Aust. Mus. 7

SOME OBSERVATIONS ON THE CARPENTARIAN GRASSWREN

John Whitaker
3428 Hartford Drive
Chattanooga, Tennessee 37415. U.S.A.

In late July 1982 on the direction of John McKean I visited the sandstone escarpment near Borroloola, Northern Territory, to try and locate the little known and apparently rare Carpentarian Grasswren *Amytornis dorotheae*. After a difficult search of eight days quite satisfactory looks were obtained. In the beginning of September 1982, with the aim of obtaining the first ever photographs of the species, I spent two days backpacking food, water, camping gear and photographic equipment into the area. It was during this time, from mid-September through mid-October, 1982 that most of the following behavioural observations were made.

My observation post was on the top of a pile of sandstone boulders approximately 12 metres above the surrounding boulder and spinifex gullies. I usually took my position just after dawn as light became strong enough to distinguish colour. The birds in the group I observed usually did not appear in the area until about 09:00. There were four individuals and there was a 'leader' who took the front position as they travelled across flat or open ground.

The incredibly fast bouncing hop that propelled the birds as they covered open areas was most impressive. The only time I observed them to fly voluntarily was to cover the space where a steep and deep chasm separated them from what was apparently a more desirable feeding area. They took wing one after the other to cross this chasm. While feeding the birds would search rock crevices and leaf and twig litter for insects and probably seeds (Schodde, 1982 describes the diet of the species as 'both insects and seeds') like a domestic hen and turn over leaves by picking them up in the bill and moving the covering out of the way. The only identifiable food items I have seen them take are spiders and small beetles.

One morning as I watched the party move leisurely through an area of small boulders surrounded by tall spinifex, a Brown Goshawk *Accipiter fasciatus* swooped low over the last bird in line causing the entire party to dive into the spinifex and disappear. The goshawk landed on a rocky promontory five to eight metres above where the party had taken refuge, and waited. After apparently seeing movement the goshawk dived from her perch, talons extended, towards the clump of spinifex. I sprang from my place waving my arms and distracted the goshawk so that she missed her target and flew away with talons empty.

About four and a half minutes passed before the 'leader' cautiously emerged from hiding and with great care began to search the area for signs of the goshawk. Without leaving overhead cover the bird spent almost another five minutes satisfying itself that the danger of attack had passed before calling to the hidden members of the party who promptly emerged and resumed normal activity.

On 29 September 1984 Judy Whitaker and her mother, who was visiting from Tasmania, located a nest with two eggs. The nest occupied the upper portion of a spinifex plant about 750 mm. tall. It was globular and 'finch-like', made of spinifex stems and lined with softer fibres. An entrance hole of approximately 50 mm. diameter led to the nest chamber and though some uncertainty exists it was thought that this hole faced almost due north. Weekly observations were made and on 14 October it was noted that one of the eggs had hatched. On that day Kath Shurcliff and I observed the nest from a distance of at least 100 metres for almost one and a half hours without seeing a visit from either parent. Kath then approached the nest and saw one bird quit the area. She thought that bird to be the male. The last visit was on 20th October, when the nest was found to be empty except for one unhatched egg. This egg and the nest were deposited with the Northern Territory Museum, Darwin.

Acknowledgements

Thanks to John McKean, Kath Shurcliff and Judy Whitaker for their support and encouragement.

References

SCHODDE, R. 1982. *The Fairy Wrens. A Monograph of the Maluridae*. Landsdowne: Melbourne.

UNUSUAL FEEDING OBSERVATIONS OF SOME TOP END BIRDS

Johnny A. Estbergs
c/o CSIRO Division of Wildlife
& Rangelands Research
P.M.B. 44
Winnellie. N.T. 5789

On several occasions during the late dry season of 1977, in a horse paddock near Darwin, an immature Brown Goshawk *Accipiter fasciatus*, was seen sallying from horse back to catch food. The horses showed no concern at the Goshawk's presence on their rumps. Sometimes the Goshawk flew to a perch to feed on prey caught when it was scared up by the horses as they moved along. At other times it would return to a horse to feed. Grasshoppers were the only prey I could identify.

On 23 February, 1979 at Lee Point, Darwin, during low tide Whistling Kites *Haliastur sphenurus* and Black Kites *Milvus migrans*, were seen preying on soldier crabs *Mictyris longicarpus*, as they were moving over the exposed flats. The Whistling Kites ran along the ground catching crabs whilst the Black Kites swooped down to catch crabs, gliding off a short distance before settling to feed. The difference between hunting strategies may be accounted for by the difference in dominance between the species. Whistling Kites tend to dominate over Black Kites at feeding sites (e.g. at carcasses). To obtain food from a carcass, a Black Kite has to be there before Whistling Kites. Otherwise it is forced to wait until the Whistling Kites have finished feeding. Hence to feed on the crabs at the same time as Whistling Kites the Black Kites swooped in after prey instead of chasing them on the ground. This probably minimised the risk of aggressive behaviour by Whistling Kites.

On 8 July 1985 at Brocks Creek, Northern Territory, near Hayes Creek, two Pied Butcherbirds *Cracticus nigrogularis* were seen feeding on the nectar of *Eucalyptus miniata* flowers. For almost an hour, in short bursts, the Butcherbirds fed, and in the same tree, often quite close, the following species also fed:

Little Friarbird *Philemon citreogularis*
Silver-crowned Friarbird *Philemon argenteiceps*
Varied Lorikeet *Psitteuteles versicolor*
Red-collared Lorikeet *Trichoglossus rubritorquis*
Northern Rosella *Platycercus venustus*

During the period I watched I saw no aggressive or evasive behavior by any species. This seemed unusual as the friarbirds in particular are aggressive to many other honeyeaters and predatory species.

In September 1985, near Beatrice Hill on the Arnhem Highway, two Torresian Crows *Corvus orru* were feeding on nectar from the flowers of *Grevillea pteridifolia*.

RECENT N.T. RECORD OF RED-NECKED PHALAROPE

Niven McCrie
4 Wilfred Ct,
Driver, N.T. 5787

On 10 February 1987, at about 18:30, a Red-necked Phalarope *Phalaropus lobatus* was observed wading and feeding in shallow water on a tidal mudflat adjacent to mangroves at Palmerston (12° 32'S 130° 57'E) near Darwin. The bird was first noticed from a distance of about 70 metres and was eventually approached to within about eight metres.

The bird's overall appearance was of a strikingly white wader with patchy grey upperparts and a bold blackish patch around the eye. Compared with nearby Red-necked Stints *Calidris ruficollis*, it was, in the fairly hunched posture it consistently maintained, about the same height but distinctly heavier and longer-bodied. Its legs were blackish and short, giving it a noticeably horizontal appearance. Its bill was black, needle-like, and approximately equal to the length of its head. Its crown, back and wings were mottled grey. From the hindcrown a dark area extended down the back of the neck, almost appearing as a 'mane'. The entire underparts were white. In flight the bird showed a distinct wingbar and had white sides to the dark rump. The phalarope was heard to give a 'twick' call several times.

The phalarope was also seen by myself and other observers on 11 February feeding in the same spot and on 15 February swimming in an adjacent sewerage pond.

Except for a record at Alice Springs Sewerage Ponds in 1983 (Percival 1984), the Red-necked Phalarope has only been recorded in the Northern Territory in 1974, when there were several records, including a specimen, from near Darwin (McKean *et al.* 1975).

References

- McKEAN J.L., M.C. BARTLETT and C.M. PERRINS. 1975. New records from the Northern Territory. *Aust. Bird Watcher* 6: 45-6
- PERCIVAL, D. 1984. Letter to the Editor. *N.T. Naturalist* 7:3

ROOSTING OF YELLOW WAGTAILS NEAR DARWIN

Niven McCrie

4 Wilfred Ct, Driver N.T.

At about 18:00 on 28 December 1986, approximately 40 Yellow Wagtails *Motacilla flava* were observed at Sanderson Sewerage Ponds, near Darwin. Most of the birds were preening or resting, although a small number were hawking for insects over the ponds or seemed to be picking for insects on the gravel roads. The colour of the underparts varied between individual birds. Some were completely yellow from chin to undertail; others showed yellow throats and undertails but with whitish breasts and abdomens, and a number showed variations between these plumages. The birds showed clear brows, and these were noted to be whitish rather than buff or yellowish. None of the birds showed any black around the throat.

The following morning there were only six wagtails there at 08:00. On 30 December there were 25 wagtails present at about 18:00.

It has been noted overseas that Yellow Wagtails roost in large flocks (e.g. King *et al.* 1983; Viney & Phillips 1983), but this has been rarely recorded in Australia. Johnson (1982) noted the occurrence of 50 Yellow Wagtails at Kununurra, Western Australia, but generally the species is seen in northern Australia singly or in pairs or small groups (J.L. McKean pers. comm.; Blakers *et al.* 1984; pers. obs.).

It seems likely that many or most of the wagtails roosting at Sanderson would have been feeding at the adjacent Leanyer Swamp, where they are recorded in small numbers quite regularly (J.L. McKean pers. comm.) although on two occasions I observed small groups of wagtails flying high towards Sanderson in the evening from another swamp some six kilometres away.

Acknowledgement

I am grateful to John McKean for his assistance with this note.

References

- BLAKERS, M., S.J.J.F. DAVIES & P.N. REILLY. 1984. *The Atlas of Australian Birds*. Melbourne University Press: Melbourne.
- JOHNSON, R.E. 1982. The Yellow Wagtail in Australia. *W. Aust. Nat.* 15: 61-66.
- KING, B., M. WOODCOCK & E.C. DICKINSON. 1983. *A Field Guide to the Birds of South-East Asia*. Collins: London.

KING, B., M. WOODCOCK & E.C. DICKINSON. 1983. *A Field Guide to the Birds of South-East Asia*. Collins: London

VINEY, C. & K. PHILLIPS. 1983. *New Colour Guide to Hong Kong Birds*. Government Printer: Hong Kong

INDEX TO THE N.T. NATURALIST NO. 1 - 10, 1977 - 1987.

Compiled by Niven McCrie

GENERAL INDEX

Archerfishes in the Northern Territory	9-13
Australian Pelican, Unusual Case of Mortality in the.....	3:7
Barking Spider <i>Selenocosmia stirlingi</i> , (Hoog), Effects of a Bite from a.....	6:16-17
Birds, Common, of the Darwin Suburbs.....	1:7-12
Birds, Top End, Unusual Feeding Observations of Some	10
Black Falcon <i>Falco subniger</i> , An Observation of piracy in	2:6
Black-footed Tree Rat, Notes on the, in a Modified Environment	5: 8-9
Blue-billed Duck, First Record of the, for the Northern Territory	10
Carpentarian Grasswren, Some Observations on the	10
Common Sheath-tailed Bat <i>Taphozous georgianus</i> , an Albino, from the Arnhem Land Escarpment	3:6
Crabs of the Tidal Beach at Lee Point, Darwin	4:4-8
Citrine Wagtail <i>Motacilla citreola</i> , A Sighting from Arnhem Land, N.T.	5:21
Cuckoos <i>Cuculidae</i> , The Status of, in the Darwin Area, Northern Territory, 1974 - 1980	5:13-19
Cuckoo-shrikes <i>Campephagidae</i> , The Status of, in the Darwin Area, Northern Territory, 1974 - 1984	9:8-14
Curl Snake <i>Denisonia suta</i> (Peters), The, a Dangerous Elapid in the Northern Territory	7:12-17

Desert Death Adder <i>Acanthophus pyrrhus</i> , (Boulenger, 1898), Notes on the, with the First Reproductive Record	4:21-22
<i>Emydura victoriae</i> (Grey 1842), A Nest and Hatchlings of	8:3-4
European Rabbit <i>Oryctolagus cuniculus</i> , A Short Note on Some Biological Characteristics of the, in the Northern Territory	8:8-11
Ferns, Native, of the Northern Territory, Growing	2:7-11
Figbirds, Agonistic Behaviour of, at a Fruiting Banyan Fig	9:23
Fishes, Reef, of the Darwin Area	1:15-20
Fox <i>Vulpes vulpes</i> , A Short Note on the Distribution of the, in the Southern Northern Territory	6:20-23
Frog <i>Litoria dahlii</i> , A Note on Cannibalism in the	4:23
Great Reed Warbler <i>Acrocephalus arundinaceus</i> , Some Notes on the Occurrence of the, in the Northern Territory	6:3-8
Hermit Crabs, The, of Darwin	10
Horseshoe Bat, Extension of Range in the	2:5
Jasper Gorge Area, Brief Notes on the Geology of the	8:17
Jasper Gorge, Victoria River Downs, Some Observations of	8:13-16
Kingfishers and their Allies <i>Coraciiformes</i> , The Status of, in the Darwin Area, N.T., 1974-1982	7:18-29
Kultarr <i>Antechinomys laniger</i> , Recent Observation and Habitat Preference of the, in the Northern Territory	9:3-8
<i>Lingula</i> , Notes on the Genus	1:3
Little Ringed Plover <i>Charadrius dubius</i> , Subspecific Identification of an Australian Specimen of	6:14-15

Mammals, Small, Some Records of, from the Southern Northern Territory	8.5-12
<i>Mastotermes darwiniensis</i> (Froggat), A Note on the Biology and Distribution of	9:14-17
Molossid Bat <i>Tadarida jobensis colonicus</i> , Cave Dwelling in the	5:12
<i>Nephrurus asper</i> (Gunther, 1897), Notes on the Biology of	2:19-22
Northern Jezabel Butterfly, Notes on the	1:13-14
Northern Long-necked Tortoise <i>Chelodina rugosa</i> , Notes on the Reproduction of the	3:4-5
Ornithological Survey, Oceanic, Between Derby, W.A., and Darwin, N.T.	3:8-13
Ornithology, Northern Territory, Bibliography of Part 1	3:20-36
Part 2	9:18-23
Painted Honeyeater, A Second Record for the Northern Territory of the	4:9
Pitted-shelled Turtle <i>Carettochelys insculpta</i> , The, in the Northern Territory	3:14
<i>Planigale tenuirostris</i> Narrow-nosed Planigale, Mammals of Lake Nash and Georgina Downs Stations and a first Record of	10
Praying Mantids and Geckos, Observations of Predator/Prey Relationships between	5:10
Rainforest of the Upper Adelaide River, Notes on the	3:2-3
Red Lionfish <i>Pterois volitans</i> , Notes on the, and its Occurrence in Darwin Waters	3:21-22
Red-necked Phalarope, Recent N.T. Record of the	10:

Reptiles and Amphibians of the Northern Sector of the N.T., Checklist of	4:16-19
Reptiles and Amphibians of the Southern Sector of the N.T., Checklist of	4:14-16
Reptile Records, New, for the Northern Territory	2:3-4
Reptiles, Some Rock Dwelling, of the Arnhem Land Escarpment	2:14-18
Ring-tailed Dragon <i>Chelosania brunnea</i> , Note on the Reproductive Biology of the	5:6
Rufous Night Heron, Discovery of a, Rookery in the Northern Territory	5:20
Scincid Lizard <i>Cryptoblepharus litoralis</i> (Mertens 1958) Notes on the, in the Northern Territory	7:4-7
Sea Wasps in the Northern Territory	1:4-6
Sheath-tailed Bat <i>Taphozous pyrrhus</i> , Occurrence of the, in the Northern Territory	4:20
Shining Flycatchers, Male, An Agonistic Display in	4:24
Shrimps of Tropical Seas, The	8:18-27
Skink <i>Mabuya multifasciata</i> , Does the, occur in Australia?.....	10
Spotted Redshank <i>Tringa erythropus</i> , First Sighting of the, in Australia	7:8-9
Stilt Sandpiper <i>Micropalama himantopus</i> , An Australian Record of the	5:22-23
Streaked Shearwater <i>Calonectris leucomelas</i> , in the Northern Territory	7:10-11
Taipan <i>Oxyuranus scutellatus</i> , History of the, with Two New Distribution Records	3:15-19

Thick-tailed Gecko <i>Underwoodisaurus milii</i> , A New Record for the Northern Territory of	6:18-19
<i>Typhlina bramma</i> , an Arboreal Blind Snake?	4:13
Western Chestnut Mouse <i>Pseudomys nanus</i> , Discovery of the, in the Tanami Desert	5:7
Waders, Uncommon Migrant, Some Further Records of, Near Darwin, Northern Territory	4:10-13
Yellow Wagtails, Roosting of	10

INDEX OF AUTHORS

<p> AVERY, Suzanne and WADE, Alan Growing Native Ferns of the Northern Territory </p>	2:7-13
<p> BEGG, R.J. and McKEAN, J.L. Cave Dwelling in the Molossid Bat <i>Tadarida jobensis colonicus</i> </p>	5:12
<p> BRAITHWAITE, Richard W. and ESTBERGS, Johnny A. Discovery of a Rufous Night Heron Rookery in the Northern Territory </p>	5:20
<p> BRUCE, A.J. The Shrimps of Tropical Seas </p>	8:18-27
<p> CANN, John Notes on the Reproduction of the Northern Long-necked Tortoise <i>Chelodina rugosa</i> </p>	3:4-5
<p> DAMPNEY, Alan R. <i>see</i> McKEAN, John L. and DAMPNEY, Alan R </p>	
<p> DARTNELL, Alan J. and GREY, Darryl L. Crabs of the Tidal Beach at Lee Point, Darwin </p>	4:4-8
<p> DUPE, K..V. The Pitted-shelled Turtle <i>Carettochelys insculpta</i>, in the Northern Territory </p>	3:14
<p> ESTBERGS, Elizabeth Bibliography on Northern Territory Ornithology </p>	3:20-36
<p> ESTBERGS, Johnny A Second Record for the Northern Territory of the Painted Honeyeater </p>	4:9
<p> Unusual Feeding Observations of Some Top End Birds </p>	10
<p> ESTBERGS, Johnny and GARSTONE, R. An Observation of Piracy in the Black Falcon <i>Falco subniger</i> at Darwin, N.T. </p>	2:6
<p> <i>See also</i> BRAITHWAITE, Richard W. and ESTBERGS, Johnny A. </p>	

FISHER, Keith and Lindsay	
Some Observations of Jasper Gorge, Victoria River Downs, N.T.	8:13-16
Bibliography of Northern Territory Ornithology Part 2	9:18-23
FOGARTY, Peter	
Notes on the Rainforest of the Upper Adelaide River	3:2-3
FRIEND, Gordon	
A Note on Cannibalism in the Frog <i>Litoria dahliei</i>	4:23
<i>see also</i> McKEAN, John, FRIEND, Gordon and HERTOOG, A.L.	
GARSTONE, R. <i>see</i> ESTBERGS, J.A. and GARSTONE, R.	
GIBSON, D.F. and SOUTHGATE, R.I.	
Discovery of the Western Chestnut Mouse <i>Pseudomys nanus</i> in the Tanami Desert	5:7
GILLAM, Mike W.	
The Curl Snake <i>Denisonia suta</i> (Peters) a Dangerous Elapid in the Northern Territory	7:12-17
<i>see also</i> STRONG, B.W. and M.W. GILLAM	
GOW, Graeme	
Notes on the Biology of <i>Nephrurus asper</i> Gunther 1897	2:19-20
History of the Taipan <i>Oxyuranus scutellatus</i> with Two New Distribution Records	3:15-19
Checklist of Reptiles and Amphibians of the Northern Sector of the N.T.	4:16-19
Checklist of Reptiles and Amphibians of the Southern Sector of the N.T.	4:14-16
Notes on the Desert Death Adder <i>Acanthophis pyrrhus</i> , Boulenger, 1898, with the First Reproductive Record	4:21-22
GREY, D.L.	
Sea Wasps in the Northern Territory	1:4-6
<i>see also</i> DARTNELL, Alan J. and GREY, Darryl L.	
GRIFFIN, Graham <i>see</i> ROBINSON, Geoffrey and GRIFFIN, Graham	
HERTOOG, A.L. <i>see</i> McKEAN, John L. and HERTOOG, A.L.	
and McKEAN, John L., FRIEND, Gordon and HERTOOG, A.L.	
HORNER, Paul G.	
Notes on the Scincid Lizard <i>Cryptoblepharus litoralis</i> (Mertens, 1958) in the Northern Territory	7:4-7
KOWALICK, David	
Agonistic Behaviour of Figbirds at a Fruiting Banyan Fig	9:23
LOW, A.W. <i>see</i> STRONG, B.W. and LOW, A.W.	
MARTIN, Keith	
Reef Fishes of the Darwin Area	1:15-20
Notes on the Red Lionfish <i>Pterois volitans</i> and its Occurrence in Darwin Waters	2:21-22

Archerfishes in the Northern Territory	6:9-13
McCRIE, Niven	
Roosting of Yellow Wagtails	10:
A Recent N.T. Record of the Red-necked Phalarope	10:
McKEAN, John L.	
Oceanic Ornithological Survey Between	
Derby, W.A., and Darwin, N.T.	3:8-13
A Citrine Wagtail <i>Motacilla citreola</i>	
Sighting from Arnhem Land, N.T.	5:21
Some Notes on the Occurrence of the	
Great Reed Warbler <i>Acrocephalus arundinaceus</i>	
in the Northern Territory	6:3-8
The Status of Cuckoo-shrikes <i>Campephagidae</i>	
in the Darwin Area, Northern Territory, 1974-1984	9:8-14
McKEAN, John L. and DAMPNEY, Alan R.	
First Sighting of the Spotted Redshank	
<i>Tringa erythropus</i> in Australia	7:8-9
McKEAN, John L., FRIEND, Gordon and HERTO, A.L.	
Occurrence of the Sheath-tailed Bat	
<i>Taphozous saccolaimus</i> in the Northern Territory	4:20
McKEAN, John L. and HERTO, A.L.	
Extension of Range in the Horseshoe Bat	2:5
Some Further Records of Uncommon Migrant Waders	
Near Darwin, N.T.	4:10-13
McKEAN, John L., HERTO, A.L. and MARR, N.	
An Australian Record of the Stilt Sandpiper	
<i>Micropalama himantopus</i>	5:22-23
McKEAN, JOHN L. and THOMPSON, Hilary A.F.	
Subspecific Identification of an Australian Specimen	
of the Little Ringed Plover <i>Charadrius dubius</i>	6:14-15
see also BEGG, R.J. and McKEAN, John L.	
and PANQUEE, Peter and McKEAN, John L.	
MILLER, L.R.	
A Note on the Biology and Distribution of	
<i>Mastotermes darwiniensis</i> Froggat	9:14-17
PANQUEE, Peter and McKEAN, John L.	
Unusual Case of Mortality in the Australian Pelican	3:7
PENGILLEY, R.	
Note on the Reproductive Biology of the	
Ring-tailed Dragon <i>Chelosania brunnea</i>	5:6
PERCIVAL, David	
Streaked Shearwater <i>Calonectris leucomelas</i>	
in the Northern Territory	7:10-11

ROBINSON, Geoffrey and GRIFFIN, Graham	
Effects of a Bite from a Barking Spider	
<i>Selenocosmia stirlingi</i> Hoog	6:16-17
SMITH, Anthony M.A. and WOOD, Timothy C.	
A Nest and Hatchlings of <i>Emydura victoriae</i> (Gray 1842)	8:3-4
SOUTHGATE, R.I. see GIBSON, D.F. and SOUTHGATE, R.I.	
STOKES, Tony	
An Agonistic Display in Male Shining Flycatchers	4:24
STRONG, B.W. and GILLAM, M.W.	
A New Record for the Northern Territory of the	
Thick-tailed Gecko <i>Underwoodisaurus milii</i>	6:18-19
STRONG, B.W. and LOW, W.A.	
A Short Note on the Distribution of the Fox	
<i>Vulpes vulpes</i> in the Southern Northern Territory	6:20-23
Some Records of Small Mammals from the	
Southern Northern Territory	8:5-7
A Short Note on Some Biological Characteristics	
of the European Rabbit <i>Oryctolagus cuniculus</i>	
in the Northern Territory	8:8-10
Recent Observations and Habitat Preference	
of the Kultarr <i>Antechinomys laniger</i> in the	
Northern Territory	9:3-8
SWANSON, Stephen	
Some Rock-dwelling Reptiles of the	
Arnhem Land Escarpment	2:14
An Albino Common Sheath-tailed Bat	
<i>Taphozous georgianus</i> from the Arnhem Land Escarpment	3:6
<i>Typhlina bramina</i> , an Arboreal Blind Snake?	4:13
THOMPSON, H.A.F.	
Common Birds of the Darwin Suburbs	1:9-14
The Status of Cuckoos <i>Cuculidae</i> in the	
Darwin Area, Northern Territory, 1974-1980	5:13-19
The Status of Kingfishers and their Allies	
<i>Coraciiformes</i> in the Darwin Area, N.T., 1974-1982	7:18-29
see also McKEAN, John L. and THOMPSON, Hilary A.F.	
WADE, Alan	
Notes on the Northern Jezabel Butterfly	1:15-16
see also AVERY, Suzanne and WADE, Alan	
WELLS, Richard	
New Reptile Records for the Northern Territory	2:3-4
WHEELER, John	
Notes on the Black-footed Tree Rat in	
a Modified Environment	5:8-9

WHITE, Graham

Notes on the Genus *Lingula* 1:3

WHITEHEAD, Brian

Brief Notes on the Geology of the Jasper Gorge Area 8:17

WOOD, Timothy C. *see* SMITH, Anthony M.A. and WOOD, Timothy C.

WRIGHT, Peter

Observations of Predator/Prey Relationships

Between Praying Mantids and Geckos 5:10-11

SPECIES INDEX

BIRDS

- ACCIPITER *Collared Sparrowhawk* novaeseelandiae 1:8
 cirrocephalus 8:13 APROSMICTUS *Red-winged Parrot*
Australian Goshawk erythropterus 1:7,8:13
 fasciatus 8:13 APUS *Fork-tailed Swift*
 ACROCEPHALUS *Great Reed Warbler* pacificus 3:9,3:12
 arundinaceus 6:3-8 ARDEA *White-faced Heron*
Australian Reed Warbler novaehollandiae 3:10
 australis 6:3-8 ARENARIA *Ruddy Turnstone*
Clamorous Reed Warbler stentoreus 6:4
 AEGOTHELES *Australian Owlet Nightjar* interpres 3:8,3:10,3:11,3:12
 cristatus 8:14 ARTAMUS *Black-faced Woodswallow*
 AMYTORNIS *Carpentarian Grasswren* cinereus 8:15
 dorotheae 10: *White-breasted Woodswallow*
 ANOUS *Masked Woodswallow* leucorhynchus 1:10,8:15
Common Noddy personatus 8:15
 stolidus 3:8,3:10,3:11,3:12 BULWERIA *Jouanin's Petrel*
Lesser Noddy fallax 3:18
 tenuirostris 3:9 CACATUA *Sulphur-crested Cockatoo*
 ANSERANAS *Magpie Goose* galerita 1:7,8:13
 semipalmatus 1:6 ANTHUS *Galah*
Richard's Pipit roseicapilla 1:7,8:13

CALIDRIS

Baird's Sandpiper

bairdii 7:8

White-rumped Sandpiper

fuscicollis 4:11

Pectoral Sandpiper

melanotos 7:8

Little Stint

minuta 4:11,7:8

Red-necked Stint

ruficollis 3:10,3:11

Long-toed Stint

subminuta 7:8

Temminck's Stint

temminckii 4:11

Great Knot

tenuirostris 3:10

CALONECTRIS

Streaked Shearwater

leucomelas 3:9,7:10-11

CALYPTORHYNCHUS

Red-tailed Cockatoo

magnificus 1:7,8:13

CONOPOPHILA

Rufous-banded Honeyeater

albogularis 1:9,5:14

CECROPIS

Tree Martin

nigricans 1:8,3:11

CENTROPUS

Pheasant Coucal

phasianus 1:7,8:13

CEYX

Azure Kingfisher

azureus 7:18-19, 8:14

Little Kingfisher

pusillus 7:19

CHARADRIUS

Little Ringed Plover

dubius 4:10,6:14-15,7:8

Greater Sand Plover

leschenaultii 3:10,3:11

Lesser Sand Plover

mongolus 3:10

Oriental Plover

veredus 3:10,7:8

CHLAMYDERA

Great Bowerbird

nuchalis 1:10,8:15

CHLIDONIAS

White-winged Black Tern

leucoptera 3:9,3:12

CHRYSOCCYX

Horsfield Bronze-cuckoo

basalis 3:11,5:15-16

Little Bronze-cuckoo

minutillus 5:14-15

Black-eared Cuckoo

osculans 5:16

Rufous Bronze-cuckoo

russatus 5:15

CISSOMELA

Banded Honeyeater

pectoralis 8:14

CISTICOLA

Golden-headed cisticola

exilis:9

COLLURICINCLA

Grey Shrike-thrush

harmonica 8:14

CORACINA

Black-faced Cuckoo-shrike

novaeollandiae 1:8,8:14,9:910,
9:23

White-bellied Cuckoo-shrike

papuensis 1:8,8:14,9:10-11

Cicadabird

tenuirostris 9:11

CORVUS

Torresian Crow

orru 1:10,5:18,8:15,10;

CRATICUS

Pied Butcherbird

nigrogularis 1:10,8:15

torquatus 1:10	<i>Grey Butcherbird</i>	EURYSTOMUS	
CUCULUS		orientalis 1:8,7:29	<i>Dollarbird</i>
pallidus 5:14	<i>Pallid Cuckoo</i>	FALCO	
variolosus 5:14,5:15	<i>Brush Cuckoo</i>	berigora 1:6,8:13	<i>Brown Falcon</i>
DACELO	<i>Blue-winged Kookaburra</i>	cenchroides 1:6,8:13	<i>Australian Kestrel</i>
leachii 1:7,7:20-21,8:14		longipennis 2:6	<i>Australian Hobby</i>
DICAEUM	<i>Mistletoebird</i>	subniger 2:6	<i>Black Falcon</i>
hirundinaceum 1:9,8:14		FREGATA	
DICRURUS	<i>Spangled Drongo</i>	ariel 3:9,3:10,3:12	<i>Least Frigatebird</i>
hottentottus 1:10		minor 3:12	<i>Great Frigatebird</i>
DUCULA	<i>Torresian Imperial-Pigeon</i>	GALLINAGO	
spilorrhoa 1:17		stenura 7:8	<i>Pintailed Snipe</i>
EGRETTA	<i>Great Egret</i>	GEOPELIA	
alba 3:9	<i>Little Egret</i>	cuneata 8:13	<i>Diamond Dove</i>
garzetta 3:9,3:11	<i>Eastern Reef Egret</i>	humeralis 1:7,8:13	<i>Bar-shouldered Dove</i>
sacra 3:10,3:11,3:12		striata 1:7,8:13	<i>Peaceful Dove</i>
ELANUS	<i>Black-shouldered Kite</i>	GERYGONE	
notatus 1:6	<i>Letter-winged Kite</i>	chloronata 1:9,5:15	<i>Green-backed Gerygone</i>
scriptus 1:6		magnirostris 5:15	<i>Large-billed Gerygone</i>
ENTOMYZON	<i>Blue-faced Honeyeater</i>	olivacea 8:14	<i>White-throated Gerygone</i>
cyanotis 1:9,5:17		tenebrosa 5:15	<i>Dusky Gerygone</i>
EPHIANURA	<i>Yellow Chat</i>	GRALLINA	
crocea 5:21		cyanoleuca 1:10,8:15	<i>Magpie Lark</i>
EUDYNAMYS	<i>Indian Koel</i>	GRANTIELLA	
scolopacea 1:7,5:16	<i>Long-tailed Cuckoo</i>	picta 4:9	<i>Painted Honeyeater</i>
taitensis 4:11,5:17-18			

HALCYON

Collared Kingfisher
chloris 7:25-26

Forest Kingfisher
macleayii 1:7,7:21-23

Red-backed Kingfisher
pyrrhopygia 1:7,7:23

Sacred Kingfisher
sancta 1:7,3:8,3:11,7:24

HALIASTUR

Brahminy Kite
indus 1:6

Whistling Kite
sphenurus 1:6,8:13,10:

LALAGE

Varied Triller
leucomela 1:9,9:12-13

White-winged Triller
sueurii 1:8,8:14,9:11-12

(tricolor) 9:11-12

LARUS

Lesser Black-backed Gull
fuscus 4:10

Dominican Gull
dominicanus 4:10

LICHENOSTOMUS

White-gaped Honeyeater
unicolor 1:9,5:14,8:14

Yellow-tinted Honeyeater
flavescens 8:14

LICHMERA

Brown Honeyeater
indistincta 1:9,5:10,8:14

LIMOSA

Bar-tailed Godwit
lapponica 3:10,3:11

LOCUSTELLA

Grey's Grasshopper Warbler
fasciolata 6:4

LONCHURA

Chestnut-breasted Finch
castaneothorax 1:9

Yellow-rumped Finch

flaviprimna 1:10

MALURUS

Variegated Fairy-wren
lamberti 8:14

Red-backed Fairy-wren
melanocephalus 8:14

MELITHREPTUS

White-throated Honeyeater
albogularis 1:9

MEROPS

Rainbow Bee-eater
ornatus 1:8,7:27-28,8:14

MICROPALAMA

Stilt Sandpiper
himantopus 5:22-23

MILVUS

Black Kite
migrans 1:6,10:

MOTACILLA

Pied Wagtail
alba 5:21

Grey Wagtail
cinerea 5:21

Citrine Wagtail
citreola 5:21

Yellow Wagtail
flava 3:8,3:9,5:20,10:

MYIAGRA

Shining Flycatcher
alecto 4:24,8:14

Paperbark Flycatcher
nana 5:14,5:15

Broad-billed Flycatcher
ruficollis 5:14

MYZOMELA

Red-headed Honeyeater
erythrocephala 1:9

NEOCHMIA

Crimson Finch
phaeton 8:14

NINOX

Southern Boobook

novaeseelandiae 8:13

NUMENIUS

Little Curlew

minutus 1:7

Whimbrel

phaeopus 3:10

Eastern Curlew

madagascariensis 3:10

NYCTICORAX

Rufous Night Heron

caledonicus 5:20

NYMPHICUS

Cockatiel

hollandicus

OCEANITES

Wilson's Storm Petrel

oceanicus 3:12

OCEANODROMA

Matsudaira's Storm Petrel

matsudairae 3:12

ORIOIUS

Yellow Oriole

flavocinctus 1:10,9:23

Olive-backed Oriole

sagittatus 8:14

OXYURA

Blue-billed Duck

australis 10:

PACHYCEPHALA

Rufous Whistler

rufiventris 8:14

PARDALOTUS

Striated Pardalote

striatus 1:9,8:14

PELECANUS

Australian Pelican

conspicillatus 3:7

PEOPHILA

Long-tailed Finch

acuticauda 8:14

Double-barred Finch

bichenovii 1:9,8:14

PETROPHASSA

White-quilled Rock Pigeon

albipennis 8:13

PHAETHON

Red-tailed Tropicbird

rubricauda 3:9

PHALAROPUS

Red-necked Phalarope

lobatus 10:

PHALACROCORAX

Little Pied Cormorant

melanoleucos 8:13

PHAPS

Crested Pigeon

lophotes 8:13

PHILEMON

Silver-crowned Friarbird

argenteiceps 1:9,8:14

Helmeted Friarbird

buceroideis 1:9,5:16,5:17,9:23

Little Friarbird

citreogularis 5:17,8:14

PHILOMACHUS

Ruff

pugnax 4:12,4:13,7:8

PHYLLOSCOPUS

Arctic Warbler

borealis 3:9,3:13

PLATYCERCUS

Northern Rosella

venustus 8:13

PLUVIALIS

Lesser Golden Plover

dominica 3:10,3:11

POMATOSTOMUS

Grey-crowned Babbler

temporalis 8:14

PTERODROMA

Tahiti Petrel

rostrata 7:10

RAMSAYORNIS

	<i>Bar-breasted Honeyeater</i>	TADORNA	
fasciatus 5:14			<i>Radjah Shelduck</i>
RHIPIDURA		radjah 1:6	
	<i>Willie Wagtail</i>	THRESKIORNIS	
leucophrys 8:14			<i>Straw-necked Ibis</i>
	<i>Northern Fantail</i>	spinicollis 1:6	
rufiventris 8:14		TRICHOGLOSSUS	
SCYTHROPS			<i>Red-collared Lorikeet</i>
	<i>Channel-billed Cuckoo</i>	rubritorquis 1:7,8:13	
novaeollandiae 5:18		TRINGA	
SMICRORNIS			<i>Grey-tailed Tattler</i>
	<i>Weebill</i>	brevipes 3:8,3:10,3:11	
brevirostris 8:14			<i>Spotted Redshank</i>
SPHECOTHERES		erythropus 7:8-9	
	<i>Figbird</i>		<i>Wood Sandpiper</i>
viridis 1:10,5:17,9:23		glareola 7:8	
SPHENISCUS			<i>Common Sandpiper</i>
	<i>Magellan Penguin</i>	hypoleuca 3:11	
magellanicus 4:11			<i>Wandering Tattler</i>
STERCORARIUS		incana 4:12	
	<i>Pomarine Skua</i>		<i>Greenshank</i>
pomarinus 3:8,3:12		nebularia 3:12,7:8	
STERNA			<i>Redshank</i>
	<i>Bridled Tern</i>	totanus 7:8	
anaethetus 3:9,3:10,3:11		TYTO	
	<i>Lesser Crested Tern</i>		<i>Barn Owl</i>
bengalensis 3:8,3:9,3:12		alba 10:	
	<i>Crested Tern</i>		<i>Eastern Grass Owl</i>
bergii 3:8,3:10,3:11,3:12		longimembris 2:6	
	<i>Sooty Tern</i>		<i>Masked Owl</i>
fuscata 3:9,3:10,3:11,3:12,3:13		novaeollandiae 8:14	
STILTIA		VANELLUS	
	<i>Australian Pratincole</i>		<i>Masked Lapwing</i>
isabella 1:7		miles 1:7	
SULA		ZOSTEROPS	
	<i>Brown Booby</i>		<i>Yellow White-eye</i>
leucogaster 3:8,3:9,3:12		lutea 1:9	

REPTILES and AMPHIBIANS

ACANTHOPHIS		macquarii 8:3	
	<i>Desert Death Adder</i>	victoriae 8:3-4	
pyrrhus 4:21-22		GEHYRA	
	<i>Common Death Adder</i>		<i>Northern Diella</i>
antarcticus 4:21		australis 8:15	
AMPHIBOLURUS		nana 8:15	
	<i>Ring-tailed Dragon</i>	HETERONOTIA	
caudicinctus 5:6			<i>Prickly Gecko</i>
CARETTOCHELYS		binoei 5:4	
	<i>Pitted-shelled Turtle</i>	HEMIDACTYLUS	
insculpta 3:14			<i>House Gecko</i>
CARLIA		frenatus 5:10-11	
	<i>Scincid Lizard</i>	LAMPROLEPSIS	
gracilis 5:4		smaragdina 10:	
CHELODINA		LITORIA	
	<i>Common Long-necked Tortoise</i>	aurea 4:23	
longicollis 3:4			<i>Green Tree Frog</i>
	<i>New Guinea Long-necked Tortoise</i>	caerulea 5:10	
novaeaguineae 3:4			<i>Saxicoline Tree Frog</i>
	<i>Northern Long-necked Tortoise</i>	coplandi 8:15	
rugosa 3:4		dahlia 4:23	
CHELOSANIA		inermis 4:23	
	<i>Ring-tailed Dragon</i>	meiriana 8:15	
brunnea 5:6		raniformis 4:23	
CROCODYLUS		LOPHOGNATHUS	
	<i>Freshwater Crocodile</i>		<i>Gilbert's Dragon</i>
johnstonii 8:15		gilberti 8:15	
CRYPTOBLEPHARUS		LYMNODYNASTES	
	<i>Scincid Lizard</i>		<i>Ornate Burrowing Frog</i>
litoralis 8:15		ornatus 8:15	
megastictus 8:15		MABUYA	
CTENOTUS		multifasciata 10:	
inornatus 8:15		MEGISTOLOTIS	
pantherinus 8:15			<i>Carpenter Frog</i>
EGERNIA		lignarius 8:15	
	<i>Major Skink</i>	MENETIA	
frerei 2:17,10:			<i>Main's Skink</i>
EMYDURA		maini 2:3	
	<i>Kreffit's River Tortoise</i>	MORETHIA	
kreffitii 8:3			<i>Firetail Skink</i>

ruficauda 8:15		PSEUDONAJA	
NEPHRURUS			<i>Common Brown Snake</i>
	<i>Rough Knob-tailed Gecko</i>	textilis 3:15-19	
asper 2:19		PYTHON	
NOTOSCINCUS			<i>Oenpelli Python</i>
	<i>Kinghorn's Skink</i>	oenpelliensis 2:15	
kinghorn 2:3		TYPHLINA	
	<i>Broom's Skink</i>		<i>Flower Pot Snake</i>
ornatus 2:4,8:15		bramina 4:13	
	<i>Wotjulum's Skink</i>		<i>Robust Blind Snake</i>
wotjulum 2:4		ligata 2:3	
OXYURANUS		UNDERWOODISAURUS	
	<i>Taipan</i>		<i>Thick-tailed Gecko</i>
scutellatus 3:15		mili 6:18	
PSEUDECHIS		VARANUS	
	<i>King Brown Snake</i>		<i>Spiny-tailed Monitor</i>
australis 3:15		acanthurus 2:17	

MAMMALS

ANTECHINOMYS		gigas 3:6	
	<i>Kultarr</i>	MACROPUS	
laniger 8:5,9:3-8			<i>Red Kangaroo</i>
CANIS		rufus 10:	
	<i>Dingo</i>	MACROTIS	
familiaris 10:			<i>Greater Bilby</i>
DASYURUS		lagotis 8:6,8:7,10:	
	<i>Northern Native Cat</i>	MESEMBRIONYS	
hallucatus 2:17			<i>Black-footed Tree Rat</i>
FELIS		gouldii 5:8-9	
	<i>Feral Cat</i>	MUS	
catus 6:18,8:6			<i>House Mouse</i>
HIPPOSIDEROS		musculus 8:5,8:6,8:7,10:	
	<i>Diadem Horseshoe Bat</i>	MYOTIS	
diadema 2:5			<i>Large-footed Myotis</i>
LEGGADINA		adversus 5:12	
	<i>Forrest's Mouse</i>	NOTOMYS	
foresti 8:6,8:7,10:			<i>Desert Hopping Mouse</i>
MACRODERMA		alexis 8:5,8:6,8:7	
	<i>Ghost Bat</i>	ONYCHOGALEA	

Northern Nail-tail Wallaby
unguifera 10:
ORYCTOLAGUS

European Rabbit
cuniculus 6:20,6:21,8:5,8:6,8:8-12,
9:3,9:6
PETROGALE

Short-eared Rock Wallaby
brachyotis 2:17
PLANIGALE

Narrow-nosed Planigale
tenuirostris 10:
PSEUDOMYS

Desert Mouse
desertor 5:7

Sandy Island Mouse
hermannsbergensis 8:6,8:7

Western Chestnut Mouse
nanus 5:7

PTEROPSEUDES
Rock Possum
dahli 2:17

SMINTHOPSIS

Fat-tailed dunnart
crassicaudata 8:6,8:7,10:

Stripe-faced Dunnart
macroura 10:
TADARIDA

Northern Mastiff Bat
jobensis 5:10
TAPHOZOUS

Common Sheath-tailed Bat
georgianus 3:6

Sheath-tailed Bat
saccolaimus 4:20

TRICHOSURUS
Northern Brushtail Possum

arnhemensis 5:9
Common Brushtail Possum

vulpecula 8:6,8:7
VULPES

Fox
vulpes 6:20-23

ACACIA

Mulga
aneura 6:18

Witchetty Bush
kempeana 9:6

ACROSTICHUM
Freshwater Mangrove Fern
aureum 2:8,2:10,2:12

Mangrove Fern
speciosum 2:7,2:9,2:12

ALSTONIA
Northern Milkwood

actinophylla 1:13
AMPROLEPTERIS

Protracting Fern

prolifera 2:9,2:12
AMYEMA

Mistletoe
bifurcatum 1:13

ARISTIDA
glandulosa 9:6

AVICENNIA
mangrove

6:3,6:4
BLECHNUM

Swampwater Fern
indicum 2:12

Northern Swamp Fern
orientale 2:7,2:12

CALLITRIS
intratropica 3:2
CALYTRIX 5:8
CARPENTARIA

Carpentaria Palm

acuminata 2:10
CASUARINA
australianum 3:2

Desert She-oak

decaisneana 5:4

Coastal She-oak

equisetifolia 7:25
CHEILANTHES

Rock Fern

tennifolia 2:7,2:12
CHENOPODIUM

Northern Bluebush

auricumum 9:6
CLEISTOCALYX
operculata 3:3
CYCAS 4:13

CYCLOSORUS

Creeping Swamp Fern

interruptus 2:7,2:10,2:12

DECAISNINA

Mistletoe

signata 1:13

DICRANOPTERIS

Hay-rake Fern

linearis 2:7,2:8,2:12

DRYNARIA

Basket Fern

quercifolia 2:7,2:9,2:12

ELEOCHARIS 5:21

ENNEAPOGON 9:6

EUCALYPTUS

River Red Gum

camaldulensis 9:6

Coolibah

microtheca 9:6

miniata 5:8
nesophila 5:8
pruinosa 8:14
ptychocarpa 3:2

Darwin Stringybark

tetradonta 1:13,9:15

FICUS

Large Leaf Rock Fig

leucotrycha 8:14

Banyan fig

virens 9:23

GREVILLEA

pteridifolia 5:8

HELMINTHOSTACHYS

Flowering Fern

zeylancia 2:9,2:12

KHAYA

African Mahogany

senegalensis 5:8

LASTREOPSIS

tenera 2:10-11,2:12

LIGODIUM

Dragon Fern

flexuosum 2:13

Serpent Fern

japonicum 2:13

Snake Fern

microphyllum 2:7,2:8-9

LINDSAEA

Common Wedge Fern

ensifolia 2:7,2:12

LYCOPODIUM

cernuum 2:11,2:13

MARSILEA

Four-leaf Clover Fern

lutea 2:11,2:13

MELALEUCA

cajaputi 3:3

leucadendron 8:14

MELASTOMA

Native Lasiandra

polyanthum 2:10

MEULLERINA

celestroides 1:13

MISCROSORIUM

Northern Kangaroo Fern

scolopendria 2:7,2:10,2:13

MYRISTICA

insipida

3:2

NAUCLEA

coadunata 3:3

NEPHROLEPIS

Fishbone Fern

obliterata 2:10,2:13

OSBECKIA

australiana 3:2

PANDANUS 8:3

aquaticus 4:24,8:14

PITYROGRAMMA

calomelanos 2:9

PLATYZOMA

Braid Fern

microphyllum 2:9,2:13

PRUNUS 5:8

SELAGINELLA

ciliaris 2:11,2:13

SCHLEFFLERA

actinophylla 3:3

SCHIZDEA

Branched Comb Fern

dichotoma 2:10,2:13

SCLEROLAENA 9:6

STENOCHLAENA

Climbing Swamp Fern

palustris 2:7,2:8,2:10,2:13

TERMINALIA

erythrocarpa 3:2,3:3

sericocarpa 3:3

TRIODIA 4:21

TRISTANIA

suaveolens 3:2

TYPHA

domingensis 6"4

orientalis 6:4

XANTHOSTEMON

paradoxum 8:14

VAVAEA

australiana 3:2,3:3

CRABS

MYCTIRIS

Soldier Crab

longicarpus 4:4,10:

OCYPODE

Horn-eyed Ghost Crab

ceratophthalma 4:4,4:5,4:6

cordimana 4:5

fabricii 4:5,4:7

SCOPIPERA

Sand-bubbler Crab

inflata 4:4

INSECTS

COPTOTERMES

Termite

acinaciformis 9:15,9:16

DELIAS

Wood White Butterfly

aginappe 4:11

Northern Jezabel Butterfly

argenthona 4:11

HIERDULA

werneri 5:10,5:11

Large Green Mantid

MASTOTERMES

darwiniensis 4:13,9:14-17

Giant Termite

JELLYFISH

CHIRONEX

fleckeri 1:4

Box Jellyfish

CHIOPSALMUS

quadrigatus 1:4

LAMP SHELLS

LINGULA 1:3

SHRIMPS

ARETOPSIS

amabilis 8:20

CHERNOCARIS

placunae 8:26

CONCHODYTES

maleagrinae 8:18

FENNERA

chacei 8:19

PERICLEMENES

brevicarpalis 8:25

PLATICARIS

latirostris 8:20

RACILIUS

compressus 8:20

THOR

SPIDERS

LATRODECTUS

hasselti 6:16

Red-backed Spider

SELENOCOSMIA

stirlingi 6:16-17

Barking Spider

Journal of the Northern Territory Field Naturalists' Club

CONTENTS

	Page
W.A. LOW and B.W. STRONG. Mammals of Lake Nash and Georgina Downs Stations and a first record of the Narrow-nosed Planigale <i>Planigale tenuirostris</i> from the Northern Territory	3
GARY J. MORGAN. The Hermit Crabs of Darwin	6
GLEN INGRAM. Does the skink <i>Mabuya multifasciata</i> , occur in Australia?	9
R. NOSKE and F. van GESSEL. First record of the Blue-billed Duck for the Northern Territory	11
JOHN WHITAKER. Some observations on the Carpentarian Grasswren	14
JOHNNY A. ESTBERGS. Unusual feeding observations of some Top End birds	16
NIVEN McCRIE. Recent N.T. record of Red-necked Phalarope	17
NIVEN McCRIE. Roosting of Yellow Wagtails near Darwin	18